# Navajo Abandoned Uranium Mine

# Site Screen Report

This form is for use at the site of abandoned uranium mines (AUM) located on Navajo Nation lands. Applicable sites include all mine and mine features that have or have not undergone reclamation by the Navajo Abandoned Mine Lands Reclamation Program, including features, adits, pits and waste piles. Applicable sites also include all AUM sites listed in the USEPA CERCLIS database, all sites listed in the 2008 AUM GIS Report issued by USACOE and USEPA, all AUM sites on allotment lands associated with the Navajo Nation, and any and all AUM sites not listed in any database located on Navajo lands. Reconnaissance of any sites located on lands adjacent to Navajo lands that may be impacting Navajo lands will need to be coordinated with the authorities appropriate to those lands.

The purpose of the form is to ascertain the status and location of the identified AUM site, and record all immediate site information associated with the mine site. Decisions and recommendations on what additional steps are needed will be provided on a separate document.

Mine Name: Claim 10 Mine ID: 807

Navajo AUM Central Region

Prepared by:

Weston Solutions, Inc.

Contract: W91238-06-F-0083

20074.063.017.0020

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# Part I **Site Identification, Location and Status** Site Names and ID numbers as applicable Mine ID: 807 Map ID: C24 **CERCLIS:** NNN000909206 Navajo Abandoned Mine Land Reclamation Program: NA-0702 Local name / Aliases: Homer Scott No. 10; Claim No. 10; Homer Scott; Dry Run Canyon Chapter and local area: Tselani / Tachee County: Apache State: Arizona Lat/Long: 36.2099653802 N / -109.871087296 W Nearby road and highway: Route 29 Local Post Office: Blue Gap, AZ Surface Land Status: check one or more and provide ownership and contact information below **Tribal Trust Land** Public lands **Private Tribal Fee Land Bureau of Land Mgmt Allotment** State Fee land **Subsurface Mineral Rights:** No information on subsurface mineral rights ownership was found in the EPA/AUM Database.

# Claim and operator information:

The mine surface land status is classified as Tribal Trust Land. Historical documents identified the operator of the mine as Joseph Costanza from 1965 to 1966. No additional historical ownership / lease information was identified in the EPA / AUM database.

Number of residential structures within 200 feet of mine: None

# Part II Summary of Radiological Readings

**Mine ID: 807** 

**Highest gamma radiation measurement:** 82,554 counts per minute (cpm)

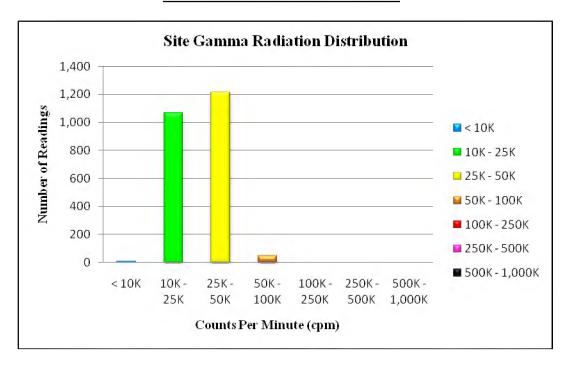
**Background Average:** 14,986 cpm **Two Times Background:** 29,972 cpm

# Describe any other radiological measurements:

A total of 2,342 gamma radiation measurements were collected from the mine site, ranging from 9,058 cpm to 82,554 cpm. Measurements collected in the vicinity of the reclamation area were found at a maximum level of approximately 40,000 cpm, and in the vicinity of the waste rock of approximately 80,000 cpm. The measurements are represented in Figures 1 and 2.

### **Distribution Chart and Statistics:**

<b>Site Gamma Radiation Statistics</b>	
Number of Readings	2,342
Minimum (cpm)	9,058
Maximum (cpm)	82,554
Mean (cpm)	28,363
Median (cpm)	25,903
Standard Deviation	10,419



#### Part III Status of Reclamation and Mine Waste

**Mine ID: 807** 

The following information was obtained from the Navajo Abandoned Mine Land Reclamation Program (NAMLRP) Point Features Database:

NAMLRP Status of the mine site: Reclaimed: Yes Waste Pile onsite: Yes

NAMLRP Project Number: NA-0702

**NAMLRP Mine features:** 1 Rim Strip / Pit

The following information was obtained from field observations collected during the 2011 site screening:

Provide description and status of all mine sites and features at site. Include all waste piles, adits, pits and other features, and indicate whether they are open, closed, covered, capped, buried or unreclaimed. Indicate approximate size, shape and extent, including description of any reclamation caps. Note condition of all caps.

#### Observed reclamation work and status:

#### Adits:

None observed

## **Waste Piles:**

None observed

#### Pits:

None observed

# **Shafts:**

None observed

## **Other Debris and Mine Features:**

Reclamation cap, 200' diameter, center of site, red sandy clay

#### Part IV Site Observations and Environs

Observed Residential Structures (number and human habitation status of structures at the following distances from mine):

0 to 200 feet: None observed

200 feet to 0.25 mile: None observed

Observed Public or Commercial Structures (schools, clinics, Chapter Houses, places of business and any other structures used by members of the community at the following distances from the mine site):

0 to 200 feet: None observed

**200 feet to 0.25 mile:** None observed

Levels measured around the perimeter(s) of the identified structure(s):

None

Observed Water Sources (number and type of wells and surface water sources that are potentially used for human consumption at the following distances from the mine site):

**0 to 0.25 miles:** None observed

**0.25 miles to 4 miles:** Residential pond approximately 2.5 mi NW of site

Sensitive Environments (all sensitive environments located within visible range of the mine site, including: wetlands, endangered species, habitats and approximate locations of sites that may be under protection of the government of the Navajo Nation):

None observed

Known Site History (information from interviews with Chapter officials and residents and database review, includes: mine ownership, type of mining operation, period of operation, known amount of production, and any other information provided):

The Claim 10 mine claim consists of an area of 28,497.44 m<sup>2</sup>. The mine was identified as being operational from 1965 to 1966. While operational, the mine had a total reported production volume of 4,323 tons. The mine surface land status is classified as Tribal Trust Land. Historical documents identified the operator of the mine as Joseph Costanza from 1965 to 1966. No additional historical ownership / lease information was identified in the EPA / AUM database.

# Part V Response Action Summary

# **Summary of Evaluation Factors:**

# Accessibility:

Was the mine easily accessible to potential human activity? Yes

# Radiological Measurements:

Were any gamma radiation measurements collected at the mine greater than two times the site-specific background levels?

Yes

#### Waste Piles:

Were any unreclaimed waste piles observed at the mine with gamma radiation measurements greater than two times the site-specific background levels? No

#### Structures:

Were any structures observed within 200 feet of the mine? No

# Potential Drinking Water Sources:

Were any potential drinking water sources observed within 4 miles of the mine? Yes

#### Reclamation:

Was the mine reported to be previously reclaimed, or did the mine appear to be reclaimed?

Yes

# Part VI Photos



Photo 1: Mine Site #807; Cliff area



Photo 2: Mine Site #807; Reclamation area

# Part VII Contacts Reports and Information

Name:	Eugene Esplain
Title or official role (if any):	Navajo EPA Superfund Program
Telephone number:	(928) 871-7331
Address:	PO Box 2946, Window Rock, AZ 86515
Information provided:	Lead Regulatory Agency
Name:	
Title or official role (if any):	
Telephone number:	
Address:	
Information provided:	
Name:	
Title or official role (if any):	
Telephone number:	
Address:	
Information provided:	

Figure 1 - Gamma Radiation Measurements, Above Two Times Background
Claim 10 (807)
Tselani / Tachee Chapters, Navajo Nation

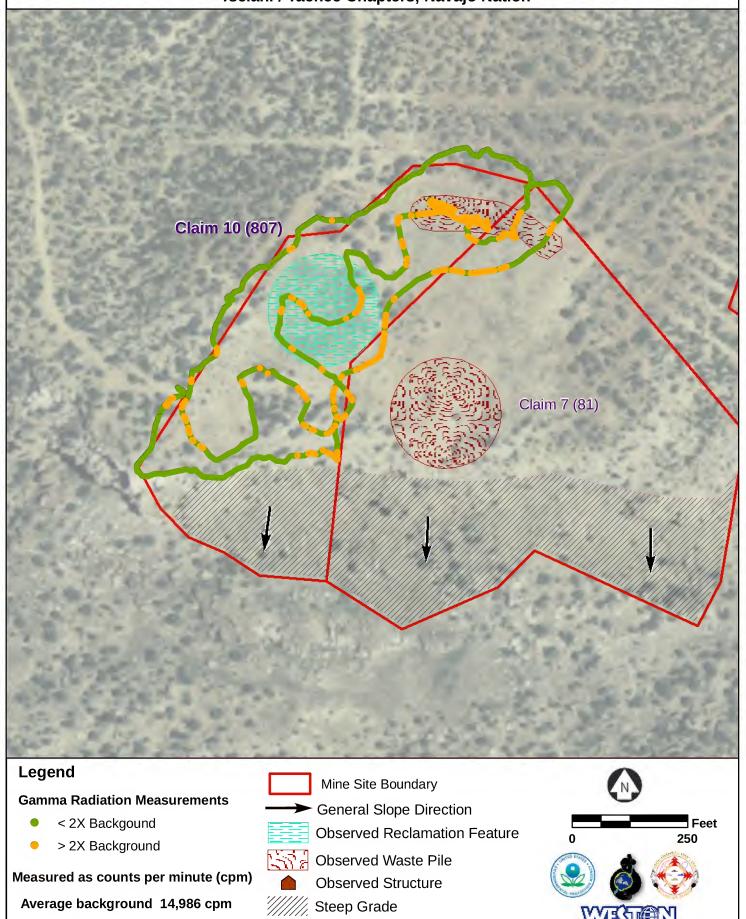
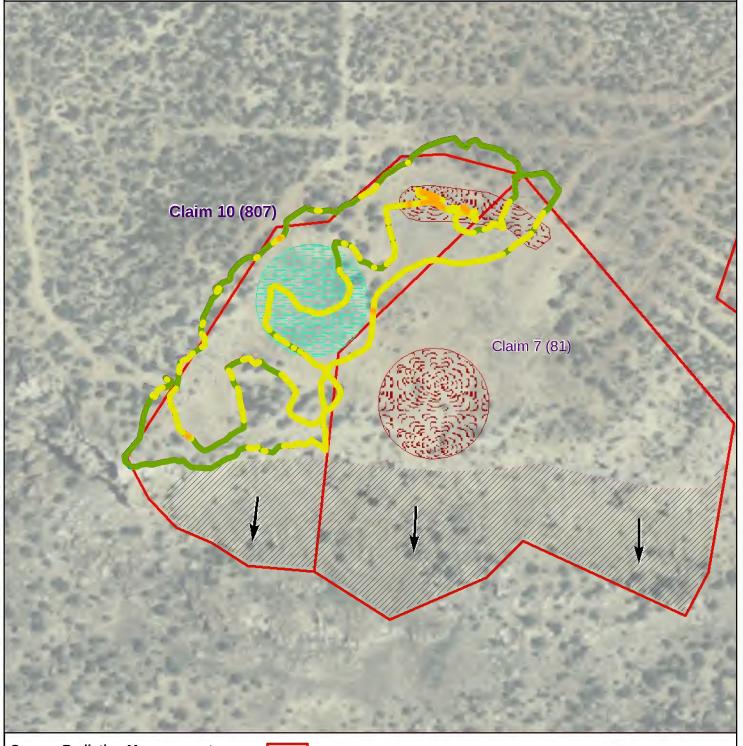


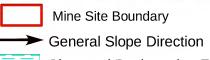
Figure 2 - Gamma Radiation Measurements Claim 10 (807) Tselani / Tachee Chapters, Navajo Nation



#### **Gamma Radiation Measurements**

- 0 10,000 cpm
- 10,000 25,000 cpm
- 25,000 50,000 cpm
- 50,000 100,000 cpm
- 100,000 250,000 cpm
- 250,000 500,000 cpm
- 500,000 1,000,000 cpm

Measured as counts per minute (cpm)



Observed Reclamation Feature

Observed Waste Pile

Observed Structure

. ///////// Steep Grade

Average background 14,986 cpm

